

Aerosol and air quality research

Bioaerosols in indoor environments

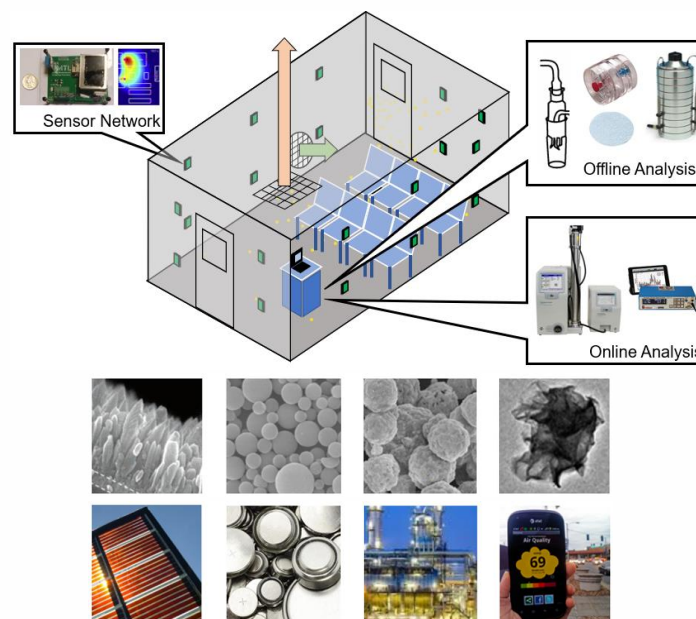
- The airborne transmission of indoor pathogens is a critical public health concern
- We deploy a series of online and offline bioaerosol measurement techniques to study indoor bioaerosol transport and evolution

Combustion aerosols and their health impact

- Fossil fuel combustion is a major source of inhalable aerosols
- We characterize the physical, chemical, and toxicological properties of various types of combustion aerosols

Development and evaluation of low-cost air quality sensors

- Low-cost air quality sensors offer monitoring with high spatio-temporal resolution
- We calibrate and deploy low-cost air quality sensors in workplaces (e.g. offices, mines) to monitor the emission and transport of air pollutants



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Keywords

- Aerosol, Air quality, Bioaerosols, Combustion, Sensors, Health impact

Recognitions

- European Aerosol Assembly Ph.D. Award (2019)
- Editor's selection of notable papers in Aerosol Sci. Technol.

Collaborative Interests

- Reactive oxidative species, nanotoxicity, combustion, Indoor air quality, drug delivery, functional nanoparticles